disorder appears to exceed 415,000 [31,905 x (2.75/35%)] + [17,000 x (3.4/35%)]. On average, 1.5 work days are lost by staff following patient assault at an annual cost of $444.4 million (based on hourly pay rates for nurses and doctors of $41 and $162, respectively). **CONCLUSIONS:** Rapid and effective de-escalation of agitation among patients with schizophrenia or bipolar disorder seeking care in the ED may reduce the incidence and associated costs of staff assaults.

PMH37

CHARACTERISTICS OF HOSPITALIZATIONS FOR ATTENTION-DEFICIT/HYPERACTIVITY DISORDER (ADHD) AMONG CHILDREN AND ADOLESCENTS IN THE UNITED STATES FROM 2000–2006

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OBJECTIVES: The aim of this research was to evaluate patient characteristics, length of stay (LOS), and costs among children and adolescents hospitalized in the United States (US) for ADHD. **METHODS:** The study used data from 2000–2006 in the Healthcare Cost and Utilization Project Nationwide Inpatient Sample (HCUP-NIS). Patients included were children (6–11 years old) and adolescents (12–17 years old) that were hospitalized with a primary diagnosis of ADHD (ICD-9-CM 314.00 or 314.01). Data collected includes age, gender, race, payer type, admission source, admission type, geographic region, hospital status, year admitted, mean LOS and mean costs. **RESULTS:** Among children, 28,247 patients met inclusion criteria and 83.74% were male. Medicaid was the most common form of health insurance (68.97%) followed by private insurance (26.67%). The majority of patients were hospitalized in urban locations (96.69%) and were admitted from the emergency room (33.75%). Mean (SE) LOS was 10.76 days (0.85) and mean (SE) costs were $10,106 ($1,358). Among adolescents, 21,612 patients met inclusion criteria and 75.70% were male. Medicaid was the most common form of health insurance (57.38%) followed by private insurance (36.99%). The majority of patients were hospitalized in urban locations (93.83%) and admitted from the emergency room (38.77%). Mean (SE) LOS was 8.66 days (0.66) and mean (SE) costs were $7886 ($1387). The number of hospitalizations for ADHD in each individual year from 2000–2006 was fairly constant for both children and adolescents. **CONCLUSIONS:** Children and adolescents hospitalized for ADHD carry a substantial economic burden to the US health care system. The majority of these patients are male, come from urban locations and have Medicaid as their primary form of health insurance. Health care decision makers should be aware of the burden of ADHD in these populations. Research evaluating the impact of behavioural and/or pharmalogical ADHD treatment on hospitalizations should be explored.

PMH38

SOCIETAL COSTS OF OPIOID ABUSE, DEPENDENCE, AND MISUSE IN THE UNITED STATES

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OBJECTIVES: Estimate the current societal costs of opioid abuse, dependence, and misuse. **METHODS:** Costs associated with opioid abuse were grouped into three major categories: health care, workplace, and criminal justice. Two general principles were adopted to estimate costs: 1) a quantity method, which multiplies the number of opioid abuse patients by the estimated cost per opioid abuse patient, and, 2) an apportionment method, which begins with the overall costs of drug abuse for a cost component and apportions the share associated with opioid abuse based on the relative prevalence of opioid abuse to overall drug abuse. Excess health care costs per patient were based on analysis of two claims datasets: a privately-insured population and Florida Medicaid. Other data/information was derived from publicly-available secondary resources (e.g., academic research, government reports and surveys). **RESULTS:** Total societal costs of opioid abuse in the U.S. were estimated at $54.5 billion annually (2008 dollars). Disaggregated by major category, workplace costs accounted for $25.1 billion (46%), health care costs accounted for $24.2 billion (44%), and criminal justice costs accounted for $5.2 billion (10%). Workplace costs were driven by lost earnings due to premature death ($11.1 billion) and reduced compensation/lost employment associated with opioid abuse ($7.8 billion). Health care costs consisted primarily of excess medical and prescription drug costs for opioid abuse patients ($23.0 billion). Criminal justice costs were largely made up of correctional facility costs attributable to opioid abuse ($2.3 billion) and police protection costs attributable to opioid abuse ($1.5 billion). **CONCLUSIONS:** The costs of opioid abuse represent a substantial and growing economic burden for society in the U.S. The increasing prevalence of abuse and related spending suggest an even greater societal burden in the future. Recent initiatives developed by the government, clinicians, and the health care industry may help reduce the burden of opioid abuse.

PMH39

COST OF ILLNESS OF POST-TRAUMATIC STRESS DISORDER COMPARED WITH MAJOR DEPRESSIVE DISORDER

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OBJECTIVES: Compare health care costs of patients with post-traumatic stress disorder (PTSD) to those of patients with major depressive disorder (MDD) in U.S. Medicaid and privately-insured populations. **METHODS:** Patients with ≥2 PTSD diagnoses (ICD-9-CM: 309.81) on/after January 1, 1999 and ≥1 PTSD diagnosis on/after January 1, 2003 were identified from Medicaid claims data from Florida, Missouri, and New Jersey (1999–2007) and from a privately-insured claims database (1999–2008). The index date was defined as the first PTSD diagnosis on/after 1/1/2003 that was not the first overall PTSD diagnosis. PTSD patients had continuous eligibility for the 6-month baseline period before and 12-month study period following their index date and were ages 18–64 during the study period. Potential MDD controls (ICD-9-CM: 296.2, 296.3) without PTSD diagnosis were identified using similar selection criteria. MDD controls were matched to PTSD patients on age, gender, state/region, employment status, index year, and race (for Medicaid patients). Study period direct costs, calculated as reimbursements in 2008 dollars to third-party payers for medical services and prescription drugs, were compared between PTSD patients and matched MDD controls using nonparametric bootstrapping. **RESULTS:** In the baseline period, PTSD patients had higher rates of other mental disorders (e.g. anxiety, bipolar disorder), and higher average direct costs than MDD controls both in the Medicaid and privately-insured populations. Among Medicaid patients, PTSD patients also had lower average Charlson Comorbidity Index compared with MDD controls. Average study period direct costs were higher for PTSD patients than MDD controls ($18,753 vs. $17,990 for Medicaid and $10,960 vs. $10,024 for privately-insured, both $p < 0.05$). The difference in direct costs was driven by higher mental health-related costs for PTSD patients than for MDD controls. **CONCLUSIONS:** PTSD patients had approximately 4–10% higher direct costs in the 12-month study period compared to MDD controls driven by higher mental-health related direct costs.

PMH40

PATTERNS OF HEALTH CARE UTILIZATION AND COSTS IN PATIENTS WITH GENERALIZED ANXIETY DISORDER INITIATING ADD-ON THERAPY WITH BENZODIAZEPINES

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OBJECTIVES: To examine patterns of health care utilization and costs in patients with generalized anxiety disorder (GAD) beginning treatment with benzodiazepine anxiolytics as add-on therapy to selective serotonin reuptake inhibitors (SSRI) or venlafaxine. **METHODS:** Using a large US health insurance claims database, we identified all persons with evidence of GAD (ICD-9-CM diagnosis code 300.02) who were receiving treatment (≥90 days) with SSRIs or venlafaxine between January 1, 2003 and December 31, 2007. Among these patients, we then selected those who began add-on therapy with a benzodiazepine anxiolytic. Designating the date of initial receipt of a benzodiazepine the "index date", we compiled all health care claims over the 6-month period preceding this date ("pre-index") and the 12-month period following it ("follow-up"). Patients with incomplete data were excluded. Health care utilization and costs were then examined during these periods. **RESULTS:** A total of 2131 patients met all study inclusion criteria. Mean age was 43 years; 73% were women. Patients averaged 32 days of therapy with benzodiazepines, however, duration of therapy was >90 days, for 14% of patients. In general, levels of health care utilization during the first 6 months of follow-up were higher than during pre-index; during the second 6 months of follow-up, however, they were somewhat lower than pre-index. Median (IQR) total health care costs were $2672 ($1465-$4960) during pre-index, $2897 ($1525–5663) during the first 6 months of follow-up, and $2581 ($1270-$5107) during the second 6 months of follow-up. **CONCLUSIONS:** Overall health care utilization and associated costs increased following initial GAD diagnosis. Although the duration of treatment is typically brief, some patients receive benzodiazepine anxiolytics as add-on therapy to SSRIs or venlafaxine for periods longer than 90 days, which is not recommended due to risks of dependency and sedation.

PMH41

THE SOCIETAL COST OF SCHIZOPHRENIA IN SWEDEN

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OBJECTIVES: To investigate the health care resource utilization and cost-of-illness in patients with schizophrenia in Sweden. **METHODS:** Data on socio-demographics and disease-related health care resource use for 2412 patients were collected using registry data for the period 2006–2008. Data on health care visits and inpatient days were obtained from the Northern Stockholm psychiatric clinic, while data on pharmaceuticals, sick leave and early retirement were obtained from the national pharmaceutical registry and the Swedish social insurance agency, respectively. Costs for community care were not available on individual level in the databases, and were therefore obtained from previous studies. The study was conducted from a societal perspective, with indirect costs valued according to the human capital method. **RESULTS:** The average annual cost per patient with schizophrenia in the period 2006–2008 was estimated at €48,300o (US$68,800) in 2009 prices. Total costs increased by 8% from 2006 to 2008, mainly because of increased indirect costs. Outpatient care represented 5%, inpatient care 9%, pharmaceuticals 3%, community care 24% and productivity losses 59% of total costs. Costs (excluding community care cost, which was not available on the individual level) were significantly and positively correlated with lower functioning as assessed with GAF (General Assessment of Functioning). Costs in the lowest GAF class (GAF < 50) were almost three times as large as in the highest GAF class (GAF > = 70). Men had significantly higher indirect